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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,851

12/22/2003

Jean-Marie Tran

871.0118.U1(US)

9087

29683 7590 05/29/2009
HARRINGTON & SMITH, PC
4 RESEARCH DRIVE, Suite 202
SHELTON, CT 06484-6212

EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

05/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,851	Applicant(s) TRAN, JEAN-MARIE	
	Examiner LAWRENCE B. WILLIAMS	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 2/26/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-23 and 26-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-23 and 26-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-2, 4-14, 16-23, 26-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims, both method and apparatus are directed to a filter that approximates an inverted amplitude or power response of at least a transmit filter (Fig. 2, 56) or a receive filter (Fig. 2, 106A, 106B). Applicant discloses the searcher implemented in prior art embodiment of Fig(s). 1 and 2 (pg. 7, lines 1-3). However, the specification discloses on pg. 7, line 31-pg. 8, line 1 and Fig. 3A, Filter with 206A output), "the output of the amplitude calculation block 204 is applied to a deconvolution processing block 206 that also receives a filter signal 206A". However, the examiner is unable to ascertain from the specification or drawings what exactly is this filter that supplies a filter signal, 206A.

3. Claims 1, 2, 8-9, 11, 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains,

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or with which it is most nearly connected, to make and/or use the invention. Claims 1 teaches a method using a filter selected to have a filter characteristic that approximates an inverted amplitude or power response of the at least one of the transmit filter or the receive filter. As presented the claim presents two filtering processes, i.e., effects of transmit filter or effects of the receive filter. However, from the specification and Fig(s). 1, 3A-3D only one filtering process is taking place.

Claims 2, 8-9, 11 are rejected based on their dependency upon rejected claim 1.

A similar analogy is applied to claim 11.

A similar analogy is applied to claim 32.

A similar analogy is applied to claim 35.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 21, 26, and 34 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claims 22-24 stand rejected based on their dependency upon rejected claim 21.

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Claims 27-29 are rejected based on their dependency upon rejected claim 26.

Claims 35-37 are rejected based on their dependency upon rejected claim 34.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.) Yellin discloses Unified MMSE Equalization and Multi-User Detection Approach For Use in a CDMA System in US 2005/0094713 A1.

b.) He et al. discloses in US Patent 7,391,803 B2 A1 Interference Suppression in a CDMA Receiver During at Least One of Idle State and Access State Operation.

c.) Smolyar discloses in US 2003/0235237 A1 Spread-Spectrum Channel Searcher and Method For Accelerating Searching in a CDMA Receiver.

d.) Butler et al. discloses Method and Apparatus For Canceling Pilot Interference in a CDMA Communication System in US Patent 6,680,727 B1.

e.) Zangi discloses in US Patent 6,674,815 B2 Method For Symbol-Spaced Estimation and/or Tracking of a Fractionally-Spaced Fading Radio Channel.

f.) Kansakowski et al. discloses in US Patent 6,570,909 B1 Interference Suppression in a CDMA Receiver.

g.) Uesugi discloses in US Patent 6,002,727 Interference Signal-Cancellation System.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037.

The examiner can normally be reached on Monday-Friday (8:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tesfaldet Bocure/
Primary Examiner, Art Unit 2611

lbw
May 28, 2009